June 21, 2017

Response to Comments Document
Draft Waste Management Permit No. 2017DB0009

This document summarizes and addresses comments received on Alaska Department of Environmental Conservation (DEC or Department) draft Waste Management Permit (WMP) No. 2017DB0009. The public comment period for the draft permit began on May 3, 2017 and ended on June 5, 2017, and a public notice bulletin was published in the Mat-Su Valley Frontiersman on May 3 and 5, 2017. The WMP regulates the disposal of gravity separated ore waste from the Lucky Shot Mine at the proposed Lucky Shot Mill in Willow, Alaska. The Lucky Shot Mill facilities are owned and operated by Alaska Gold Torrent LLC (AGT) and located on a 29.62 acre parcel on the east side of the Parks Highway just north of milepost 75. DEC received comments from three parties, one provided permit-specific comments, one submitted general support for the permit, and one offered general opposition to the permit.

No responses have been provided to general comments (i.e., not permit specific) or those related to concerns beyond the regulatory authority of DEC. However, permit-specific comments on the DEC draft permit and DEC's responses to those comments are contained in the table on the following pages.

Comment	Topic	Comment	Comment Response
#1	Tailings Ponds	Will this mill be using a "frothing agent", and if so, what will it be? Will it be going into the tailing ponds? If so, is it harmful to the environment?	No, the mill will be only using water to separate the gold by density. There are no current plans to either install a floatation cycle or use a frothing agent. Condition 2.2.3.1 of the Waste Management Permit states, "No chemicals shall be introduced into the milling process without written Department approval." No chemicals are proposed.
#2	Tailings Ponds	How many tailing ponds will be built on this property? Are there any harmful effects these tailing ponds will have to the surrounding environment? How long does this method affect the earth in days, months, and years? More specifically, is this something that will affect the environment long term, long after the Alaska Gold Torrent company is gone from the premises?	The tailings are inert, predominantly quartz sand. The water associated with the tailings is expected to meet water quality requirements. In addition, the tailing ponds are lined so neither the sand nor the water discharges into the environment. At pond closure, the Waste Management Permit requires that fluids be pumped out and the pond capped with a liner and vegetative cover, consistent with the reclamation plan submitted to DEC and adopted by reference in the permit. The reclamation plan submitted to DEC proposes that "The ponds will be capped with at least 12 inches of growth medium, and in most locations two feet" (Project Description, p. 38). In summary, the permit allows the placement of inert material in a pit surrounded by an impermeable liner. When finished, each pond will be covered with growth media and subsequently by vegetation. There should be no effect on the surrounding water or soil, in either the short or long term. The permit allows the operator to have up to eight sand ponds open at any one time. The company has not calculated the total number of ponds that will be used. However, ponds may fill up the uplands portion of the property south of the mill.
#3	Air Quality	How will the melting of the gold into doré affect the air quality we and our children breathe, along with the plants we grow in our garden? Jade North, LLC, Alaska Gold Torrent's consultant, told us that all of the smoke released from the melting furnaces that are inside of the building will be contained within the building. Is this true or will smoke from the melting process be released into the air? If it is, what are the effects to the surrounding environment?	Air quality is outside the scope of the Waste Management Permit, which regulates containment and disposal of solid and liquid wastes. Air quality is within the jurisdiction of the Department's Division of Air Quality. However, just for information, Section 10 of the draft Minor Air Permit distributed for public comment by the Division of Air Quality requires that "Exhaust from the three electric induction furnaces will be captured, treated through baghouses and High Efficiency Particulate Arresting (HEPA) filters, and recycled into the Mill Building." (i.e., not released to the atmosphere.) Further, Section 9.6 requires that the operation "not discharge any exhaust from the induction furnaces to the atmosphere at any time."

Comment	Topic	Comment	Comment Response
#4	Slag	Where will refinery slag go? Will it to be buried on sight? If it is going to be removed in barrels, as currently planned, where will it go and will the public be notified of where it will be going? Who will be checking to make sure Alaska Gold Torrent, LLC is not burying materials on site?	The assertion that the slag is chemically inert material that can be buried onsite without affecting the environment must be documented through DEC-approved tests. Consequently, the Waste Management Permit prohibits the disposal of slag onsite. However, if the permittee provides information proving that the slag is inert, that practice could change, but only after analysis and approval by DEC to ensure that the material will not affect the environment. As the permit is currently proposed, the permittee must take the slag offsite to an approved disposal facility as any other private individual or company must do. DEC periodically inspects sites to ensure compliance with their Waste Management Permits (including hauling slag off-site).
#5	Water and Air Monitoring	Who will be testing the water and air quality to let the public know there are no issues with the mill and how often will the testing be completed? On our property, there is a salmon spawning stream (running into Little Willow Creek) not far from where the purposed tailings ponds are being built. Will this stream be tested to ensure that it remains a healthy environment for spawning Coho salmon? Also, will groundwater in the surrounding areas need to be tested? How often will the waters be tested and how will the public be notified to the safety levels of the water in all respects: to salmon, to humans, to earth, short term, long term, etc.?	Air quality monitoring is within the jurisdiction of the Department's Division of Air Quality's Minor Air Permit, not the Department's Division of Water's Waste Management Permit. The company's application submitted to DEC for the Waste Management Permit indicates no discharge to surface or ground water. The permit does not allow discharge of process water or material to surface or groundwater. While no discharge is allowed, the Waste Management Permit requires the permittee to conduct quarterly monitoring on the internal, process water. Further, the permittee is required to perform quarterly monitoring of groundwater at three sites, monitor surrounding vegetation for signs of stress, and complete weekly visual monitoring. The Waste Management Permit specifies the water quality parameters to be monitored and requires that a Quality Assurance Plan and Procedures be submitted to DEC for approval. Water quality monitoring must be reported to DEC on a quarterly basis, and monitoring reports are publicly available documents. Given intensity of site monitoring, the prohibition of surface or groundwater discharge, and the distance to surface water sources, water quality monitoring of Little Willow Creek or its tributary is not justified as any unforeseen impacts would be detected much closer onsite.

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#6	Trucks and Dust	How will the dust from the trucks coming in and out of the mill's yard, as well as the dust from the dumping of the ore be contained? Will the permittee be watering the mill site for dust control? If yes, how often?	Air quality is within the jurisdiction of the Division of Air Quality and outside the scope of the Waste Management Permit. However, just for information, Section 10 of the draft Air Permit requires that "The mill will be designed and operated with no stacks, chimneys, or vents that could release particulate matter (or any other air pollutant) into the atmosphere… All ore received at the mill will be unloaded and stored in the fully enclosed Ore Receiving and Storage Building [i.e., the trucks will be dumped inside a building]. The Mill Building, in which all crushing equipment will be located, will be fully enclosed. Water sprays will be used at multiple ore transfer points within the crushing circuit. All doors will generally be closed while the crushing circuit is being operated except for routine worker access and in the unlikely event of an emergency." In summary, the major dust sources – dumping and crushing occur within a closed building.